

*Environmental Management  
Richland Operations Office*  
**FY 2011 Congressional  
Budget Request**



**U.S. Department of Energy**

*February 1, 2010*

# Shrinking the Footprint of Active Site Cleanup

February 2010

FY 2011 Congressional Budget



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safety ❖ performance ❖ cleanup ❖ closure

September 2008

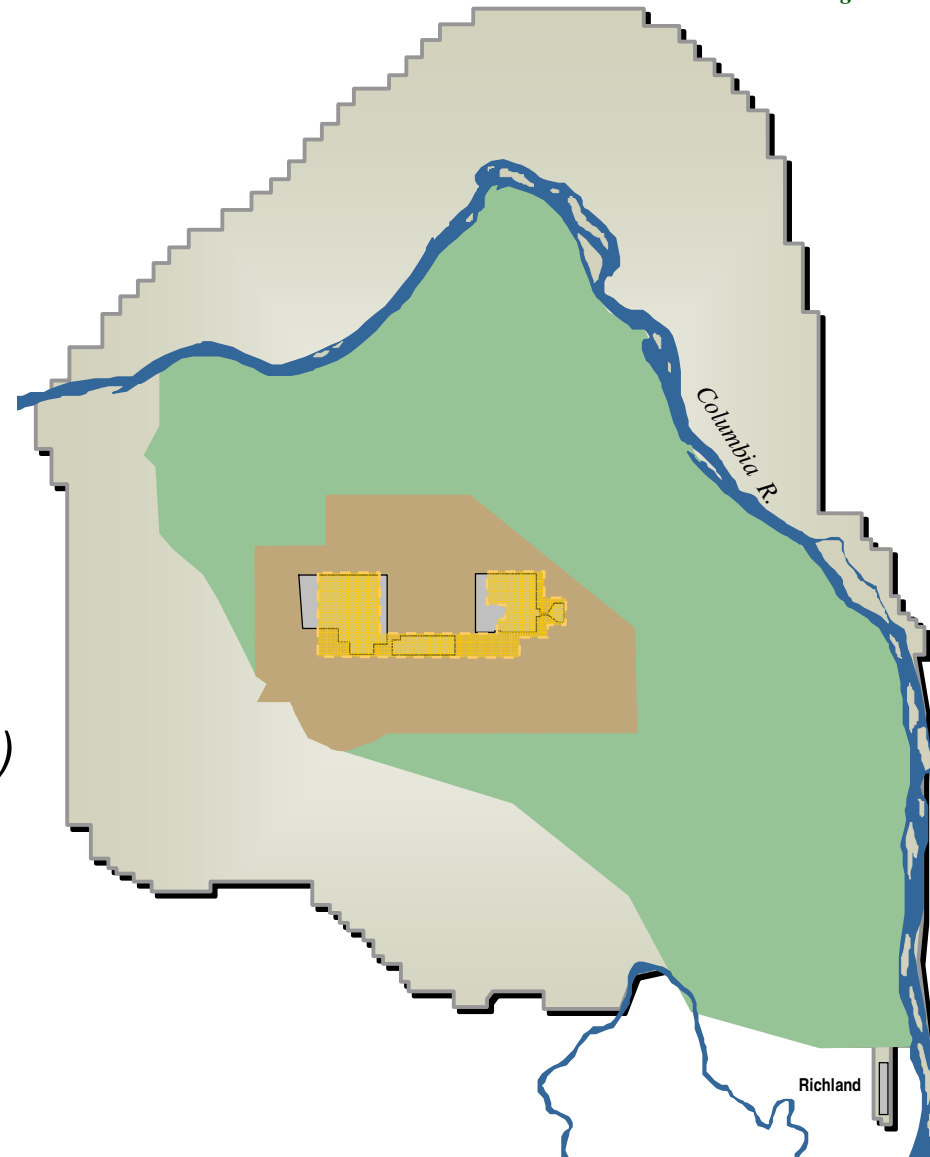
# Shrinking the Footprint of Active Site Cleanup

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Work in four areas

-  River Corridor  
(~210 sq. miles)
-  Central Plateau,  
Outer Zone  
(~65 sq. miles)
-  Central Plateau,  
Inner Zone  
(~10 sq. miles)
-  Hanford Reach National  
Monument (~300 sq. miles)  
(including Arid Lands  
Ecology Reserve)



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# Richland Cleanup Priorities

February 2010

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- Maintain Safe & Compliant Facilities and Provide Essential Services
  - Safeguards and Security
- Execute RL 2015 Vision and Achieve Regulatory/TPA Compliance
  - Columbia River Corridor cleanup/demolition of facilities, waste sites, and groundwater along the Columbia River Corridor (includes removal of sludge from the K West Basin)
  - Complete Remedial Investigation/Feasibility Study process for River Corridor
  - Plutonium Finishing Plant Decontamination and Decommissioning (D&D)
  - Central Plateau Groundwater
  - Central Plateau - Waste site remediation (with Outer Area Priority)
  - Continue Remedial Investigation/Feasibility Study Process for Central Plateau
  - Retrieve suspect TRU waste from underground storage
  - Repack TRU waste for certification and shipment
  - Central Plateau D&D Activities (other than PFP)
  - MLLW Treatment
  - FFTF D&D
- Community & Regulatory Requirements
- Replace, Renovate, and Restructure Essential Infrastructure to Support Hanford Cleanup



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# Congressional Budget Request

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## *FY 2010 Funding and FY2011 Budget Request*

(\$\$ in Thousands)

PBS	PBS Title	FY 2010 Approp. (AFP Changes)	FY 2011 President's Budget
RL-0011	NM Stabilization and Disposition - PFP	86,700	64,969
RL-0012	SNF Stabilization and Disposition	126,712	94,016
RL-0013	Solid Waste Stabilization and Disposition - 200 Area	131,070	135,026
RL-0020	Safeguards and Security	82,771	69,234
RL-0030	Soil and Water Remediation - Groundwater/Vadose Zone	205,390	129,629
RL-0040	Nuclear Facility D&D - Remainder of Hanford	90,313	139,641
RL-0041	Nuclear Facility D&D - River Corridor Closure Project	327,955	386,028
RL-0042	Nuclear Facility D&D - Fast Flux Test Facility Project	7,652	3,659
RL-0100	Richland Community and Regulatory Support	21,940	19,620
<b>Total - RL Office Base Funding Total</b>		<b>1,080,503</b>	<b>1,041,822</b>



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# ARRA Funding

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PROJECT	WORKSCOPE	FY09-FY11
Plutonium Finishing Plant D&D	<ul style="list-style-type: none"> <li>Cleanout, deactivation and decommissioning activities of the Plutonium Finishing Plant 234-5Z and its ancillary facilities including glove boxes (total estimate of 174), removal of highly contaminated ducts and filter boxes, deactivation of the process vacuum system set, tunnels and piping, process equipment, and cleanout and removal of the HVAC system</li> <li>20 Ancillary buildings ready for demolition</li> </ul>	\$330.2M
MLLW Treatment	<ul style="list-style-type: none"> <li>Treatment and disposal of an estimated 1800 cubic meters (~475,500 gallons) of the current backlog of legacy waste</li> </ul>	\$43.0M
TRU Waste	<ul style="list-style-type: none"> <li>Retrieval of an estimated 2,500 cubic meters of TRU waste from 218-E-12B, 218-W-3A and 218-W-4B</li> <li>Retrieval of an estimated 50 cubic meters of RH TRU waste from the burial grounds, including preparation to retrieve RH TRU from the 200W area caissons</li> <li>Repackaging an estimated 850 cubic meters of TRU waste in drums requiring remediation</li> </ul>	\$198.2M
Central Plateau Soil and Groundwater	<ul style="list-style-type: none"> <li>Construct groundwater remedies in River Corridor (100 Areas) and Central Plateau</li> </ul>	\$235.5M
U Plant/Other D&D	<ul style="list-style-type: none"> <li>Demolition ready of U Plant Zone canyon</li> <li>Complete deactivation, decontamination, decommissioning and demolition (D4) of 16 facilities</li> </ul>	\$256.4M
Outer Zone D&D	<ul style="list-style-type: none"> <li>Remediation of outer zone areas (200 and 600 areas), Arid Lands area (Rattlesnake Mountain) and North Slope area (Saddle Mountain)</li> <li>Complete deactivation, decontamination, decommissioning and demolition (D4) of 18 facilities</li> <li>Remediation 24 waste sites</li> <li>Disposal of 15 rail cars/locomotives</li> <li>Completion of scope results in a minimum 45% reduction of overall footprint of the Hanford Site</li> </ul>	\$114.9M
100 K Area Remediation	<ul style="list-style-type: none"> <li>Complete deactivation, decontamination, decommissioning and demolition (D4) of 12 facilities in the 100-K Area</li> <li>Complete remediation of 49 waste sites in the 100-K Area</li> </ul>	\$202.7M
ERDF Cell Expansion	<ul style="list-style-type: none"> <li>Expand operational capacity including completion of Environmental Restoration Disposal Facility (ERDF) Super Cells 9 and 10</li> </ul>	\$92.2M
Accelerated Remediation and Disposal	<ul style="list-style-type: none"> <li>Complete procurement of equipment for expanded ERDF operations</li> <li>Complete operational enhancements of ERDF to provide improved transportation, treatment, and disposal services for waste generated by other Hanford contractors</li> <li>Remediation of 18 waste sites and completion of confirmatory sampling for 67 orphan/discovery sites located in the inter areas of the Columbia River Corridor</li> </ul>	\$89.0M
River Corridor Soil and Groundwater	<ul style="list-style-type: none"> <li>Characterization and remediation of the twelve (12) 618-10 burial ground trenches</li> </ul>	\$72.4M



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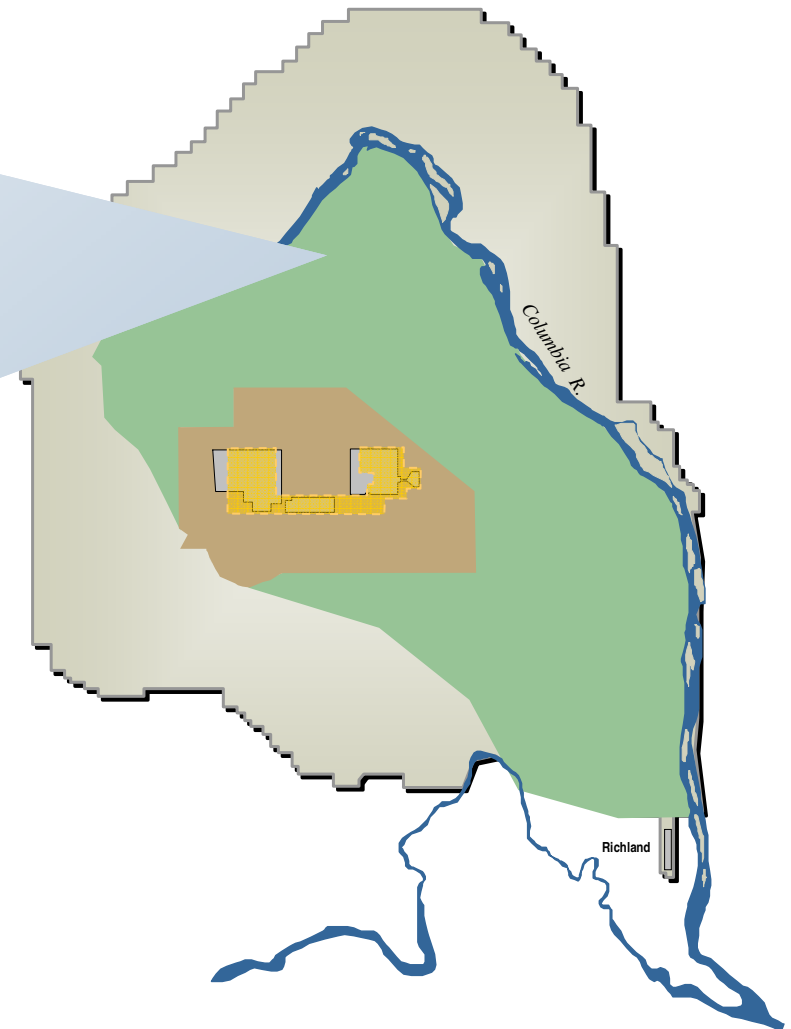
# Planned Accomplishments

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## River Corridor (~210 sq. mi.)

- Maintenance of safety systems and operations in the 100 Area, 200 Area (including Environmental Restoration Disposal Facility), 300 Area, 400 Area, and 600 Areas (RL-0041)
- Continue D&D activities and soil remediation in the 100 & 300 Area (RL-0041)
  - Complete above grade demolition of 327 building
  - Continue remediation of 100-D chromium contaminated waste sites
  - Start remediation of 100-C-7 burial ground
  - Complete remediation of 100-H burial grounds
  - Continue remediation and D4 in the 100-K area
- 100N Interim Safe Storage (RL-0041)
- Continue K-West Operations and Sludge Removal Design (RL-0012)



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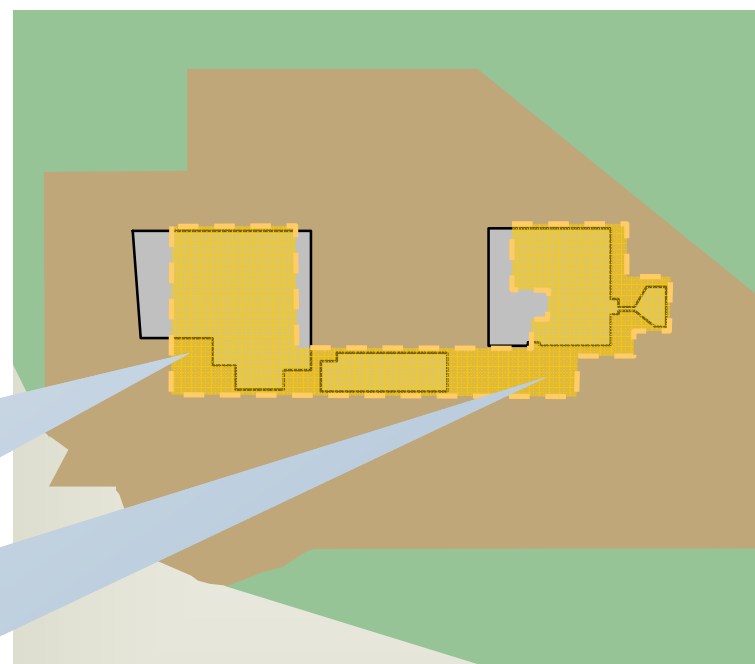
# Planned Accomplishments

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## **Central Plateau (~75 sq. mi.)**

- Continue River Corridor remedial investigation/feasibility studies and proposed plans (RL-0030)
- Continue Central Plateau remedial investigation/feasibility studies and proposed plans (RL-0030)
- Operations of waste treatment facilities (RL-0013)
- Continue long-term safe and compliant Surveillance and Maintenance of FFTF and support facilities (RL-0042)
- Staffing to minimum safe levels and perform surveillance and maintenance activities (RL-0040)
- Provide essential infrastructure and services to Hanford Cleanup (RL-0040)
- Maintain minimum safe & essential services for Plutonium Finishing Plan complex facilities (RL-0011)
- Deactivation, decontamination & removal of process & support systems & structures to prepare facilities for demolition. Completes disposition of chemicals, combustibles & materials at risk (MAR) & initiates transition of support system (i.e. criticality, HVAC, Fire Protection) for the 236-Z (PRF), 242-Z, 2736-Z/ZB Complex facilities (RL-0011)
- Maintain site-wide security (RL-0020)



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